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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,232	01/09/2001	Khiem Le	059864.00633	6982
32294 7590 06/14/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER CORRIELUS, JEAN M	
			ART UNIT 2162	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/756,232

Applicant(s)

LE ET AL.

Examiner

Jean M. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-40 and 42-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21-40, 42-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the Request Examination (RCE) filed on April 20, 2007, in which claims 1-19, 21-40 and 42-52 are presented for further examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 20, 2007 has been entered.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-19, 21-40 and 42-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, claims 1, and 19 recite the claimed "using the determined type of classification to control the communicated and compression of the information". Actually, there is no recited limitation of how to control the communicated and compression information set forth in the claim. Therefore, the claim does produce a concrete and useful result to form the basis statutory subject matter under USC 35 101.

Claim 19 recites "determining a type of classification based on said comparing".

However, the claim does not produce a concrete and useful result based on the classification type to form the basis statutory subject matter under 35 USC 101.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-19, 21-40 and 42-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. While a method for header compression could reasonably be considered a tangible result, the body of claims 1, 19, 32, 40 and 51 do not appear to actually support the preamble by including a step or steps, which accomplish tat act. Additionally, it not clear as to what communication and compression of information the classification type would control. And it is also unclear how the item list would compare with a preference item and base on which criteria such comparison would accomplish. Applicant is advised to amend the claims to clarify the 112 rejection set forth in this office action.

7. Claim 1, 19, 32 and 51 recites the limitation "the communication and compression of information". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-3, 14, 15, 19, 21, 22, 32-34, 40, 42-43 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Silver et al., (hereinafter "Silver") US Patent no. 5,481,712.

As to claims 1, 19, 32, 40 and 51-52, Holmes discloses a system and method for compressing a data sequence having a plurality of records, wherein each record has a plurality of fields with each field being classified to contain data items. In particular, Holmes discloses the claimed "'communicating information" (compressing a data sequence; col.3, lines 2-3); "comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items" (col.3, lines 5-7). Holmes does not explicitly determine the type of classification based on the comparing items and using the classification type to control the communication. However, Holmes disclose a system that indicated which data item matches the data item in the reference list and replace the current data item by a token indicating the match (col.3, lines 5-15). On the other hand, Silver discloses a list of items that is a mutable ordered collection of elements, wherein the list of items can have elements added or removed from the front or back; the list has a notion of current item and insertion and removal can be performed from there. Such lists disclosed by Silver can be traversed in forward and backward order.

Similarly to the description provided by the specification page 21, lines 1-9, which discloses the

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insertion, removal, change of content and reorder Items on the list, by comparing the current item list with the reference item list. Silver, on the other hand, discloses the claimed “determining a type of classification based on said comparing of the items of the list “ (col.50, lines 31-44; col.61, lines 10-14); and “using the determined type of classification to control the communicating the information” (col.50, lines 31-44; col.61, lines 10-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of the cited references by incorporating the use of determining classification type and control, the communicating the information based on the determined type in the system of Holmes in the same conventional manner as disclosed by Silver. One having ordinary skill in the art would have found it motivated to use such a modification for the purpose of ensuring the validity of the data item; thereby enabling a reduction in the amount of data to be transferred.

As to claims 2, 21, 33 and 42, Holmes discloses the claimed “wherein the comparing determines a difference between said current item list and said reference item list” (col.4, lines 37-50; the unmatched data items).

As to claims 3, 22, 34 and 43, Holmes discloses the claimed “sending information regarding said difference from the first entity to a second entity” (col.4, lines 40-44 difference between the unmatched items).

As to claim 14, 15, 30, 31, d 15, Holmes discloses “sending information regarding a difference between an item in said current list and a corresponding item in said reference item list”

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(transmitting the unmatched item based on the comparison between the item list and the reference item list; see col.); and “whether the item is in the reference item list” (col.).

11. Claims 4-13, 16-18, and 23-29, 34-39, 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes US Patent no. 5,864,860 and Silver et al., (hereinafter “Silver”) US Patent no. 5,481,712 and further in view of Svanbro et al (hereinafter Svanbro”) US Patent no. 6,535,925.

As to claim 4 and 25, Holmes and Silver disclose substantially the invention as claimed.

However, Holmes does not explicitly disclose the use of encoding the information regarding said difference prior to sending said information from said first entity to said second entity. On the other hand, Svanbro discloses the claimed feature “encoding the information regarding said difference prior to sending said information from said first entity to said second entity”(col.5, line 15-21, compression technique). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 5 and 26, Holmes and Svanbro disclose substantially the invention as claimed.

However, Holmes does not explicitly disclose the claimed wherein encoding the information

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comprises encoding information regarding a position of a newly added item to said reference item list. On the other hand, Svanbro discloses the claimed feature “wherein encoding the information comprises encoding information regarding a position of a newly added item to said reference item list” (col.5, line 15-col.8); and “encoding information regarding which item in said reference item list is not in said current item list” (col.5, line 15-col.8, line 63). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 6 and 27, Holmes and Svanbro disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the claimed wherein encoding the information comprises encoding information regarding which item in said reference item list is not in said current item list. On the other hand, Svanbro discloses the claimed feature “wherein encoding the information comprises encoding information regarding which item in said reference item list is not in said current item list”(col.5, line 15-col.8, line 63). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes’ fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination

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because that would provide Holmes' system the enhanced capability of efficiently compressing a header of a real-time communication packet.

As to claims 7-11 and 28, Holmes and Svanbro disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the claimed wherein encoding the information comprises encoding information regarding content of at least one item in said reference item list. On the other hand, Svanbro discloses the claimed feature "wherein encoding the information comprises encoding information regarding content of at least one item in said reference item list"(col.5, line 15-21, compression technique). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred

As to claim 29, Holmes and Svanbro disclose substantially the invention as claimed. However, Holmes does not explicitly disclose the claimed wherein said information further comprises a type of encoding. On the other hand, Svanbro discloses the claimed feature "wherein said information further comprises a type of encoding" (col.5, lines 15-col.6, line 65). Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate

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the use of a robust and efficient compression of list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Jean M. Corrielus
Primary Examiner
Art Unit 2162

June 11, 2007